

I. AMENDMENTS

Claims

Please amend claims 32, 74, 75, 76, and 79 as indicated below. Please cancel claims 77 and 78. Please add claims 81-83. Upon entry of the present amendment, the status of the claims will be as follows:

1 to 30. (Cancelled)

31. (Previously presented) A kit comprising:

- (a) a microarray comprising a plurality of antibodies located at discrete locations on a solid surface; and
- (b) a first reagent for labeling a cell lysate.

32. (Currently amended) A kit according to claim 31 further comprising instructions for comparing protein expression in two or more populations of cells or characterizing a cell based on the pattern of protein expression produced thereby.

33. (Original) A kit according to claim 31 wherein the antibodies are monoclonal antibodies, polyclonal antibodies or antibody fragments.

34. (Original) A kit according to claim 33 wherein the antibody fragments are single chain antibodies.

35. (Original) A kit according to claim 31 wherein the antibodies are recombinant antibodies.

36. (Original) A kit according to claim 31 further comprising reagents for detecting an antigen and instructions for use thereof.

37. (Previously presented) A microarray comprising a plurality of antibodies located at discrete locations on a solid surface, wherein the antigen specificity of the plurality of antibodies is unknown.

38. (Cancelled).

39. (Previously presented) The microarray according to claim 37 wherein the antibodies are recombinant antibodies.

40. (Previously presented) The microarray according to claim 37 wherein the antibodies are single chain antibodies.

41 to 50. (Cancelled)

51. (Previously Presented) The kit according to claim 31 wherein the source of the antibodies at each discrete location is known.

52. (Previously presented) The kit according to claim 31, said microarray having the locations of the antibodies arranged in an ordered matrix that is spatially addressable.

53. (Cancelled).

54. (Previously presented) The kit according to claim 31 wherein the space between the discrete locations is treated to minimize non-specific binding to the solid surface.

55. (Previously presented) The microarray according to claim 37 wherein the source of the antibodies at each discrete location is known.

56. (Previously presented) The microarray according to claim 37, said microarray having the locations of the antibodies arranged in an ordered matrix that is spatially addressable.

57. (Cancelled).

58. (Previously presented) The microarray according to claim 37 wherein the space between the discrete locations is treated to minimize non-specific binding to the solid support.

59. (Previously presented) The microarray according to claim 37 wherein the antibodies are monoclonal antibodies, polyclonal antibodies or antibody fragments.

60. (Previously presented) The kit according to claim 31, wherein between 0.01 nanoliters and 100 nanoliters of the antibodies are spotted at each discrete location on the solid surface.

61. (Previously presented) The kit according to claim 31, wherein the microarray comprises 600 discrete locations per square centimeter.

62. (Previously presented) The kit according to claim 51, wherein the source of the antibodies is a known hybridoma cell line.

63. (Previously presented) The microarray according to claim 37, wherein between 0.01 nanoliters and 100 nanoliters of the antibodies are spotted at each discrete location on the solid surface.

64. (Previously presented) The microarray according to claim 37, which comprises 600 discrete locations per square centimeter.

65. (Previously presented) The microarray according to claim 55, wherein the source of the antibodies is a known hybridoma cell line.

66. (Previously presented) The kit according to claim 31, wherein the plurality of antibodies recognize mammalian proteins.

67. (Previously presented) The kit according to claim 31, further comprising a second reagent for labeling a second cell lysate.

68. (Previously presented) The kit according to claim 67, wherein the first reagent comprises a first detectable label and the second reagent comprises a second detectable label.

69. (Previously presented) The kit according to claim 31, further comprising a second microarray comprising a plurality of antibodies located at discrete locations on a second solid surface.

70. (Previously presented) A microarray comprising a plurality of antibodies located at discrete locations on a solid surface, wherein the antibodies recognize proteins of a first species.

71. (Previously presented) The microarray according to claim 70, wherein the plurality of antibodies recognize mammalian proteins.

72. (Previously presented) The microarray according to claim 70, wherein between 0.01 nanoliters and 100 nanoliters of the antibodies are spotted at each discrete location on the solid surface.

73. (Previously presented) The microarray according to claim 70, wherein the microarray comprises 600 discrete locations per square centimeter.

74. (Currently amended) The kit according to claim 31, wherein the microarray comprises antibodies spotted at at least from 48 different antibody preparations discrete locations that recognize mammalian proteins.

75. (Currently amended) The kit according to claim 74, wherein the microarray comprises antibodies spotted at at least from 90 different antibody preparations discrete locations that recognize mammalian proteins.

76. (Currently amended) The kit according to claim 31, wherein the microarray comprises a collection of 1000 different antibodies. ~~that recognize a set of 1000 human antigens.~~

77-78. (Cancelled)

79. (Currently amended) The microarray according to claims 70, wherein the microarray comprises a collection of 1000 different antibodies. ~~that recognize a set of 1000 human antigens.~~

80. (Previously presented) The microarray according to claim 70, wherein the microarray further comprises an antigen from a cell lysate, wherein the antigen is bound to a characterized antibody located on the solid surface.

81. (New) The kit according to claim 75, wherein the microarray comprises antibodies spotted at at least 384 discrete locations.

82. (New) The kit according to claim 31, wherein the microarray comprises antibodies spotted at at least 60 discrete locations, wherein the antibodies bind mammalian proteins.

83. (New) The kit according to claim 31, wherein the microarray comprises antibodies spotted at at least 192 discrete locations, wherein the antibodies bind mammalian proteins.